Remarks

Reconsideration of remaining claims 1-17 and 19-29 is respectfully requested.

In the Office action dated October 27, 2003 (application Paper No. 2), the Examiner objected to the specification and rejected all claims under 35 USC §§ 112, second paragraph and 103(a). The Examiner's various objections and rejections will be addressed below in the order appearing in the Office action.

Objection to the Specification

The Examiner first objected to the specification with respect to various terms as used at pages 16 and 18 in the specification as not corresponding to like-referenced items in the drawings. In response, applicants have amended pages 16 and 18 to correctly described the various element as they appear in FIG. 4. Applicants believe that with these amendments the Examiner's objection to the specification has been overcome.

Applicants therefore respectfully request the Examiner to reconsider this objection and find the specification in conformance with the requirements of the MPEP.

Regarding the presentation of the pending claims, applicants have corrected the numbering problem discovered by the Examiner, and have now included the proper "per claim" line numbering with each pending claim. With these corrections, applicants believe that the amended claims are allowable.

35 USC § 112, second paragraph Rejection - Claims 1-7, 12, and 26-29

The Examiner first rejected claims 1-7, 12 and 26-29 were rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the present invention. In particular, various terms in claims 1, 3, 4, 12 and 26 were cited as lacking clarity. Applicants have amended these claims, among others, as cited above, to clarify the subject matter of the present invention. With respect to claim 1, applicants have amended the definition of the first instance of "software programs" appearing at line 6 as a "diagnosis software programs" so as to differentiate this set of programs from the "maintenance software programs"

reference appearing at line 10 of claim 1. The remaining amendments are selfexplanatory.

Applicants believe that with the various amendments to the pending claims, all pending claims are now in condition for allowance. Applicants therefore respectfully request the Examiner to reconsider this 35 USC 112, second paragraph rejection and find all claims to now be ready to issue.

35 USC § 103(a) Rejection - Claims 1, 3-5 and 7

The Examiner first rejected claims 1, 3-5 and 7 under 35 USC 103(a) as being unpatentable over US Patent 6,445,774 (Kidder et al.) in view of US Patent 6,032,184 (Cogger). In particular, the Examiner cited Kidder et al. as teaching "the invention as claimed for automatically providing infrastructure maintenance response to a customer form/report/ticket in a communications network" as defined by independent claim 1, including both the teaching of "a Work-Flow Manager" and a "Maintenance Program Scheduler". The Examiner then stated that Kidder et al. did not disclose or suggest the link to an Access Provider in such a maintenance environment, but Cogger is then cited as teaching a maintenance network management program "that includes an Access Provider services".

The Examiner then concluded that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Kidder and Cogger because Cogger's method of providing Access Provider services would enhance the attractiveness of Kidder's automatic customer maintenance system by providing an all inclusive service request contact point. Therefore, service requests relating to any service organization are sent to a single location".

In response, applicants assert that Kidder cannot be found to disclose or suggest any arrangement that "automatically" launches one or more "diagnosis software programs", as defined by claim 1, to determine the cause of the customer form/report/ticket. As discussed through Kidder, the "tracking" of a trouble ticket is "automated", but the actual diagnosis problem in Kidder is handled by a live person - a "network monitor" (illustrated as elements 104, 204, 404 in the Figures). Reference is

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made to Kidder at column 1, beginning at line 13, where it states the following with respect to defining a "network monitor":

A modern telecommunications network is an extremely complex system composed of a plethora of network components. To ensure that the telecommunications network remains in proper working condition, the performance of these various network components is continuously monitored by network monitoring personnel, referred to hereinafter as "network monitors"

With this understanding of a "network monitor" as a network "personnel", and not an "automated software program", applicants believe that there remains a basic distinction between the "automatic" process of the present invention, as defined by rejected claims, and the monitor-controlled process as disclosed by Kidder. A specific description of the trouble ticket "tracking" as used by the "network monitor" is discussed in Kidder at column 8, beginning at line 26, which discusses a situation where the monitor receives an "alarm report". At this point, the network monitor "will typically first access the site specific information pertinent to the alarm report, which can be obtained through the station manager 410. To obtain site information, the network monitor 404 selects an alarm report and then selects a function within the alarm report which initiates retrieval of information for a specified site within the telecommunications network 407".

As stated in applicants' specification, one problem with modern telecommunications systems is the relatively slow response time associated with various trouble reports, based on the need for various individuals to become involved in the repair process. Accordingly, the impetus for the present invention is to "automate" the process and thus take the human element (the network monitor) out of the process. The Examiner is referred to the specification at page 7, beginning at line 2, where it states: "[t]he present invention enables customer service maintenance trouble requests to flow through the isolation, repair and turn-up processes without human intervention. Prior to the present invention, trouble requests sometimes endured a quiescent period before a technician had the opportunity to address the problem in the trouble request. However, since the present invention substantially automates the repair process, the maintenance cycle time is decreased, creating greater customer satisfaction and encourage customers to utilize a communication system that implements this invention" [emphasis added].

Applicants have amended various ones of the independent claims, where appropriate, to include the phrase "without human intervention" to further define the subject matter of the present invention and provide a better distinction between the Kidder reference and the rejected claims.

Based on the all of the differences between Kidder and the rejected claims, primarily, Kidder's reliance on the inclusion of a "network monitor" in the repair/maintenance process and applicants' "automatic" process that runs "without human intervention", applicants believe that the combination of Kidder and Cogger et al. cannot be found to render obvious the subject matter of rejected independent claim 1, or claims 3-5 and 7 which depend therefrom. Applicants therefore respectfully request the Examiner to reconsider this rejection and find claims 1, 3-5 and 7 (as amended) to be in condition for allowance over Kidder and Cogger et al.

35 USC § 103(a) Rejection - Claims 2, 6 and 8-29

Lastly, the Examiner rejected all remaining claims 2, 6 and 8-29 under 35 USC 103(a) as being unpatentable over Kidder and Cogger et al. (as above), when further considered with US Patent 5,946,372 (Jones). In particular, the Jones reference was cited by the Examiner as teaching various types of "automatic" software programs, such as an "automatic diagnosing program" and an "automatic verification program".

The Examiner then concluded that the teachings of Jones, when combined with the Access Provider teaching of Cogger et al. and the maintenance system of Kidder, renders obvious the teachings of the present invention as defined by claims 2, 6 and 8-29.

In response, applicants assert that regardless of the teachings of Cogger al. and Jones, the combination of Cogger al. and Jones with Kidder still lacks any disclosure of a communication system where "network maintenance" is automated so as to run "without human intervention", as defined by the rejected claims. Thus, applicants respectfully request the Examiner to reconsider this rejection and find remaining claims 2, 6, 8-17 and 19-29, as amended, to be ready to issue (claim 18 having been cancelled).

In summary, applicants have amended a number of the claims to overcome the Examiner's 35 USC 112, second paragraph rejections and further define the subject

matter of the present invention as defining an automatic customer maintenance system and method that performs "without human intervention". Applicants believe that the case, in its present form, is now in condition for allowance and respectfully request an early and favorable response from the Examiner in that regard. If for some reason or other the Examiner does not agree that the case is ready to issue and that an interview or telephone conversation would further the prosecution, the Examiner is invited to contact applicants' attorney at the telephone number listed below.

Respectfully submitted,

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